

WHAT IS CLAIMED IS:

1. A navigation system, comprising:
a storage device for housing navigation data; and
a navigation device for communicating with and retrieving navigation data from the storage device, wherein the navigation device generates a current score associated with a current position and a current bearing of the navigation device, the current score determines whether the device is located on a planned route and is biased to map the current position to a position on the planned route if the current score is within a predefined tolerance level.
2. The system of claim 1, wherein the communication channel includes a wireless channel.
3. The system of claim 1, wherein one or more locations receive one or more location scores based on the planned route.
4. The system of claim 3, wherein the locations are positions located on thoroughfares.
5. The system of claim 3, wherein the current score is biased to be within the predefined tolerance level if it falls within a predefined range of scores.
6. The system of claim 1, wherein the current score is regularly updated as the device moves.
7. The system of claim 1, wherein the current score is also associated with one or more weighting algorithms.

8. A navigation system, comprising:
a navigation device; and
instructions processing on the navigation device, wherein the instructions generate a current score associated with a current position of the navigation device, and wherein the current score is regularly compared to thoroughfare scores associated with positions of thoroughfares on a planned route for the navigation device, and the current score is biased in favor of being on the planned route when the current score falls within a predefined threshold.
9. The navigation system of claim 8, further comprising a display in communication with the navigation device and operable to visually and audibly present the current position and the planned route.
10. The navigation system of claim 8, wherein the current position is regularly acquired from a Global Positioning Satellite (GPS) system.
11. The navigation system of claim 8, wherein when the current score is biased, the current position is mapped to a route position on the planned route.
12. The navigation system of claim 8, wherein the current score is also associated with a current bearing of the navigation device.
13. The navigation system of claim 8, wherein the current score is also associated with a velocity of the navigation device as it moves.
14. The navigation system of claim 8, wherein the positions of thoroughfares are associated with thoroughfares within a defined radius of the current position.

15. A navigation system, comprising:
a navigation device in communication with a positioning system to determine a current position for the navigation device; and
instructions which bias the current position of the navigation device to a route position on a planned route when the current position when compared to thorough fare positions is within a predefined threshold.
16. The navigation system of claim 15, wherein the current position is compared by generating a current score for the current position and thoroughfare scores for the thoroughfare positions.
17. The navigation system of claim 15, wherein the score is generated by uses velocity information and bearing information associated with the current position.
18. The navigation system of claim 15, wherein the current position, the route position, and the thoroughfare positions are dynamically updated as the navigation device moves.
19. The navigation system of claim 15, wherein the navigation device is portable.
20. The navigation system of claim 19, wherein the navigation device is at least one of a personal digital assistant and a phone.